INTRODUCTION

Thank you for purchasing X-BOW, the integrated flying system designed especially for the Nexo Alpha Series of loudspeaker cabinets.

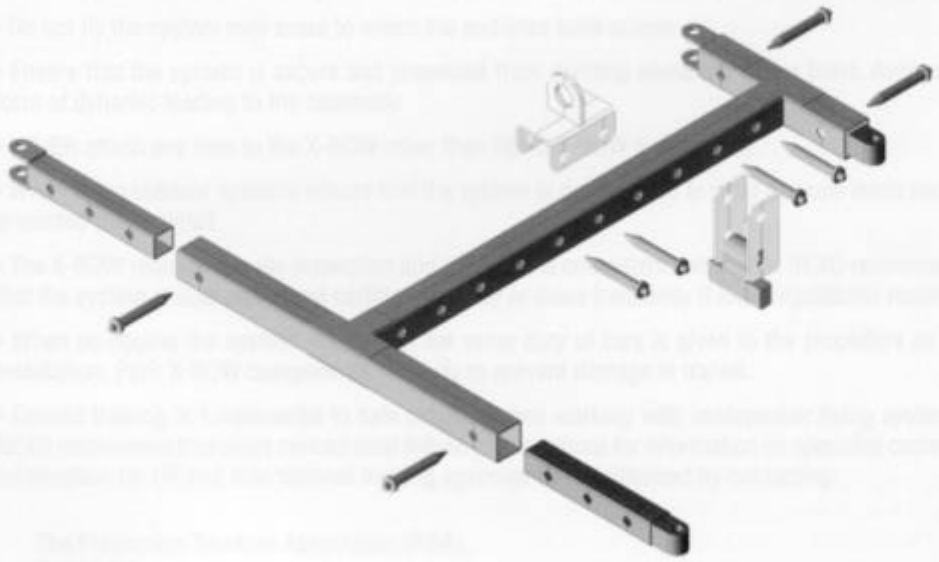
The design of X-BOW has been optimised for the dispersion characteristics of the Alpha Loudspeaker Family and enables a variety of system configurations to be flown with a minimum quantity of motor hoists. Horizontal angle adjustment between cabinets has been limited to specific settings to ensure correct acoustic coupling. Elevation control between cabinets is implemented in 2° increments to enable fine vertical adjustments.

Before proceeding with assembly of X-BOW please check the contents of the carton against the enclosed packing list and ensure that the components are correct and undamaged. In the event of any shortage please contact your supplier.

X-BOW flying systems are professional precision tools and should be handled with extreme care. Only persons who are fully conversant with the operation of X-BOW and provided with suitable safety equipment should install and operate. Misuse of X-BOW could lead to dangerous consequences. Please refer to the safety section of this manual for advice concerning X-BOW installation and handling.

NEXO offers flightcase packaging for X-BOW to ensure that the various components can be transported safely. Consult your dealer for further information.

Used and maintained correctly X-BOW will give many years of reliable service in touring systems. Please take the time to read and understand the contents of this manual and follow the recommended cabinet configurations shown in the diagrams. This information provides a solid basis for the development of consistent, coherent and predictable loudspeaker arrays.



SAFETY FIRST

The following points are designed to remind the user of safe practice when flying the X-BOW system. They cannot address every possible circumstance in which the system might be deployed, therefore the user must always apply his or her knowledge and experience. If in doubt seek advice from your dealer.

- Always inspect the X-BOW components for damage before assembly. Pay special attention to lifting points, trombone sockets and safety clips. If you suspect that any of the components are defective DO NOT USE THE AFFECTED PARTS. Contact your supplier for replacements.
- Read this manual carefully. Also be familiar with the manuals and safe working procedures for any ancillary equipment which will be used with X-BOW.
- Ensure that all local and National regulations regarding the safety and operation of flying equipment are understood and adhered to. Information on these regulations may usually be obtained from Local Government Offices.
- When deploying the X-BOW system always wear protective head wear, footwear and eye protection.
- Do not allow inexperienced persons to handle X-BOW flying systems. Installation personnel should be trained in loudspeaker flying techniques and should be fully conversant with this manual.
- Ensure that motor hoists, hoist control systems and ancillary rigging components are currently certified as safe and that they pass a visual inspection prior to use.
- Ensure that public and personnel are not allowed to pass beneath the system during the installation process. The work area should be isolated from public access.
- Never leave the system unattended during the installation process.
- Do not place any object, no matter how small or light, on top of the system during the installation procedure. The object may fall when the system is flown and is likely to cause injury.
- Secondary safety steels must be installed once the system has been flown to the operating height. Secondary steels must be fitted irrespective of the local safety standards applicable to the territory.
- Do not fly the system over areas to which the audience have access.
- Ensure that the system is secure and prevented from pivoting about the motor hoist. Avoid any form of dynamic loading to the assembly.
- NEVER attach any item to the X-BOW other than NEXO X-BOW accessories.
- When flying outdoor systems ensure that the system is not exposed to wind or snow loads and is protected from rainfall.
- The X-BOW requires regular inspection and testing by a competent test house. NEXO recommend that the system is load tested and certified annually or more frequently if local regulations require.
- When de-rigging the system ensure that the same duty of care is given to the procedure as for installation. Pack X-BOW components carefully to prevent damage in transit.
- Correct training is fundamental to safe practise when working with loudspeaker flying systems. NEXO recommend that users contact local industry associations for information on specialist courses. Information for UK and International training agencies can be obtained by contacting:

The Production Services Association (PSA),
School Passage,
Kingston-upon-Thames,
KT1 SDU Surrey,
ENGLAND.
tel: +44(0)181 392 0180

X-BOW ASSEMBLY

Care should be taken to inspect X-BOW components on the first and every subsequent occasion the system is assembled. Any component showing signs of wear or damage must be replaced. Please follow the assembly instructions carefully and **NEVER** fly X-BOW components without **ALL** X-PINS and R-CLIPS in place. Spare parts may be ordered from your distributor using the part numbers shown in the appendix to this manual.

• After removal from the transit packaging the X-BOW components must be assembled before use.

• Remove the main X-BOW spine from the transit packaging and separate the eight X-pins from the spine by removing the R-CLIPS and withdrawing the X-PINS. The X-PINS have three holes through which the R-CLIP may be fitted, allowing the same pin to be used for connecting all of the components of the X-BOW assembly.

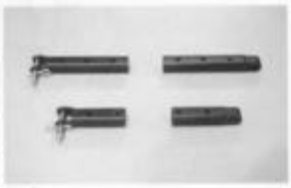
Place the X-PINS and R-CLIPS to one side. It is good practice to always refit the R-CLIP to the X-PIN after insertion or removal as a safety reminder.

X-bow spine

• Remove the four X-BONE components from the packaging. Notice that the female X-BONE is already fitted with X-PIN and R-CLIP. The female component always carries the X-PIN in transit and is always fitted to the right side of the X-BOW module (an easy way to remember the orientation is that 'The Female is Always Right!'). Slide the X-BONES into the X-BOW module arms, ensuring that the holes in the X-BONES are visible through the holes in the X-BOW. The long X-BONES should be fitted to the longer of the X-BOW arms, the short X-BONES to the rear. Slide the X-BONES into the X-BOW until the first adjustment hole in the X-BONE (nearest the connector end) aligns with the hole in the X-BOW arm.

X-pin with R-clip

• Insert an X-PIN through each X-BOW arm, thus securing the X-BONE in position. In the case of the long X-BONE, the X-PIN should be fitted with an X-TLINK before insertion through the X-BOW arm as shown in the photograph below. Ensure that the X-TLINK is oriented so that the studs on the track couplers face towards the X-BOW. Note that the X-PINS are in this instance secured in place using the second R-CLIP hole.



X-bone components

X-Tlink fitted to X-bow

• Fit the main lifting bracket (X-LBRKT) and the first cabinet bracket (X-FCBRKT) to the X-BOW spine using two X-PINS in each case. The X-FCBRKT is attached so that the circular holes form a pivot point from which the bracket can hinge downwards from the X-BOW spine as shown in the illustrations. A second X-PIN retains the X-FCBRKT to the spine for transportation and is also used to connect the X-FCBRKT to the top hinge on the first cabinet.

FLYING SINGLE X-BOW MODULES

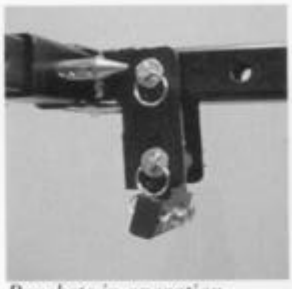
X-FCBRKT

X-LBRKT

Top hinge assembly

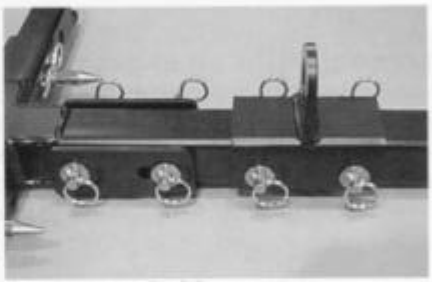
Whether flown from motor hoists, chain hoists or dead hung, the X-bow module is always connected to the supporting system by means of the lifting lug on the upper surface of the X-LBRKT. The X-bow module must never be lifted or supported from any other point.

If further points are required for fixing secondary safety steels or to achieve multiple point fixings, supplementary X-LBRKT components may be added at any point along the X-bow spine or on the front X-bow arms.

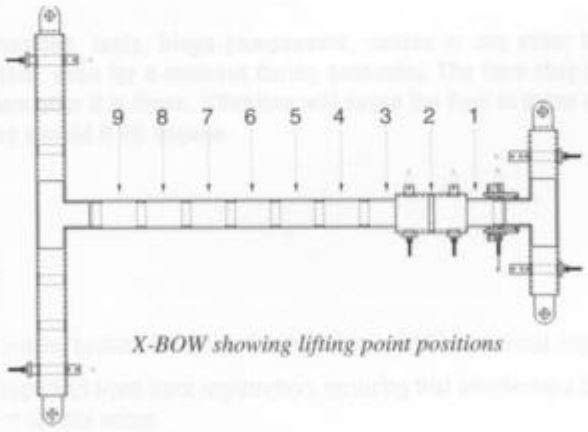


Brackets in operation

Wherever an additional X-LBRKT is added it must be attached using 2 x X-pin/R-clip. Select the required pick-up position depending upon the desired angle of the first cabinet. Commence with the X-LBRKT at position 2 (refer to the diagram).



Brackets attached for transit

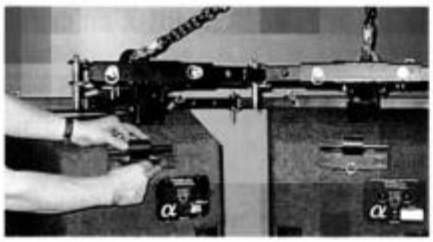


X-BOW showing lifting point positions

ATTACHING CABINETS TO X-BOW MODULES

X-bow modules are attached to the Alpha cabinets by means of the rear fitting and two front link steels, thus providing a secure **three point** fixing. It should be noted that Alpha cabinets are fitted with an **internal steel strap** linking the rear rigging plates and that the front rigging tracks are fitted to steel brackets which run the full height of the cabinet. Alpha is one of the only touring PA systems available which provides three point steel-steel flying security.

! The rigging and inspection of lifting systems requires professional expertise which is outside the scope of this manual. It is assumed in all of the following information that the motor or chain hoist(s) have been tested, inspected, installed and operated by a trained competent person with the appropriate professional certifications. Never attempt to fly a system using X-BOW unless you are sure that the lifting installation reaches these standards.



• Place an Alpha cabinet below the X-BOW and lower the X-BOW until in just touches the top of the cabinet. The X-THINGE should be removed from the X-FCBRKT by withdrawing the pins. This enables the X-THINGE to be fitted to the cabinet with ease. Please refer to hinge handling methods explained overleaf.

• Manoeuvre the X-bow so that the X-LBRKT can be swung over the X-THINGE and replace the X-PIN, not forgetting to replace the R-CLIP.

• At the front of the cabinets snap the two X-TLINK connectors into the track. Note that each hole position represents a change in elevation of the cabinet by 2°. Attachment of the X-TLINK connectors may be made with or without the wheel board in place. The cabinets may now be raised off the floor for cabling or for the connection of further Alpha cabinets using the techniques described on the following pages.

! Never place shackles, tools, hinge components, cables or any other item on the top of a loudspeaker system, even for a moment during assembly. The item may be forgotten and remain on the system after it is flown. Vibration will cause the item to move and almost certainly fall causing injury should it hit anyone.

X-KIT Components

The X-KIT cabinet linking system is easy to fit and remove and has several important attributes:

• Cabinets remain in perfect front-back registration, ensuring that interference distortion due to accidental misalignment cannot occur.

• Provides immensely strong coupling to the X-bow and between cabinets and forms part of X-BOW's important **3 point rigging system**.

• Attaches to the top, bottom or either side of the rear of the cabinet and either side at the front of the cabinet. This enables the hinge to be used in ground stacks to secure blocks of cabinets together and enables top row cabinets to be raised toward a balcony without fear of the cabinet becoming unstable.

• The X-LINK straps at the front of the cabinets allow precision adjustment of the elevation of individual cabinets in 2° steps.

• It is easy to alter the vertical angle of lower cabinets inarrays without landing the system due to the light weight of the Alpha System cabinets and the ease of X-KIT adjustment.

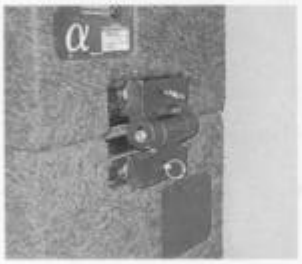
• Each X-KIT contains: 1 x X-HINGE 2 x X-LINK and may be ordered in any quantity from NEXO dealers.

FITTING THE X-HINGE

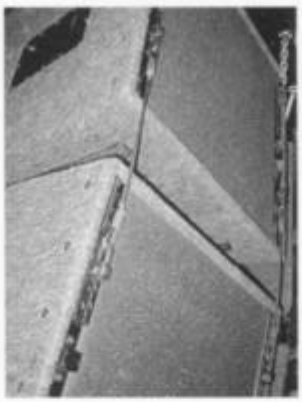
Fitting and removing the X-HINGE is a simple matter of following the procedure illustrated below. As with any other piece of rigging equipment it is very important to inspect the hinge component and the track fittings on the cabinets prior to assembly and to double check that the hinge component is securely locked in place. Fitting of X-bow components should on no account be delegated to inexperienced persons such as local crew personnel.

• Ensure that the cabinets to which the X-HINGE is to be fitted are in registration with each other. This is aided by the interlocking action of the cabinet skids with the recesses on the top of each cabinet. Inspect the track assembly for damage or loose retaining bolts. Select a hinge and inspect it for damage, noting especially the condition of the load bearing studs and the spring action of the locking pistons.

• Placing an index finger of each hand in each of the ring-pulls on the locking pistons, pull them out to withdraw the piston to the unlocked position. Offer the lower studs into the track on the upper rear of the lower cabinet.



• Pivot the upper part of the hinge forward into the track on the lower rear of the upper cabinet, engaging the load bearing studs into the track. Slide the entire hinge assembly sideways so that the hinge lies in the horizontal centre of the track. Release the locking pistons, ensuring that they engage fully with the track. Check that the shaft of the piston descends into the hinge body to the level of the ring pull. Double check that the hinge is correctly engaged by pushing the hinge body firmly from side to side.



• At the front of the cabinet fit two X-LINK straps, checking the correct engagement of the locking studs. Each hole position represents a 2° increase in elevation between cabinets.

REMOVING THE X-HINGE

Ensure that the cabinets are fully lowered and that no load is taken by the flying system. This is extremely important, as the cabinet may fall if the X-HINGE is released before the system has been properly supported from below. Grasp the ring pulls and withdraw the locking pistons whilst sliding the hinge assembly sideways. The hinge will slide out easily and should be stored in a place where it will not be damaged in transit. At the same time, remove the front X-TLINK straps and store them safely.

As the X-KIT components may become damp in use an occasional spray treatment with WD40 or similar light lubricant will ensure that they remain free from corrosion.

Flying multiple X-bow modules

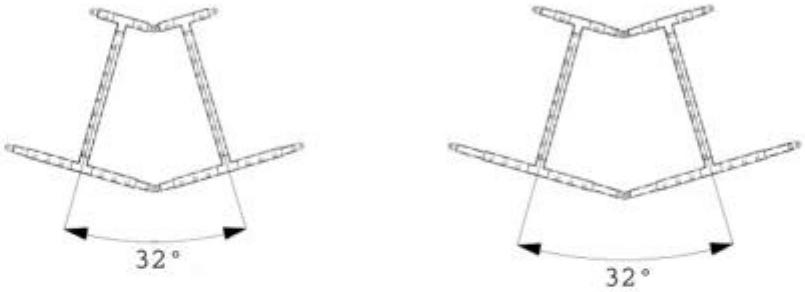
Flying techniques for multiple X-BOW modules are identical to those employed for deploying single modules, however it is necessary in adddition to:

- Link the modules together
- Attach X-BRIDLE assemblies to provide attachment between the motor hoist and the X-LBRKT points.

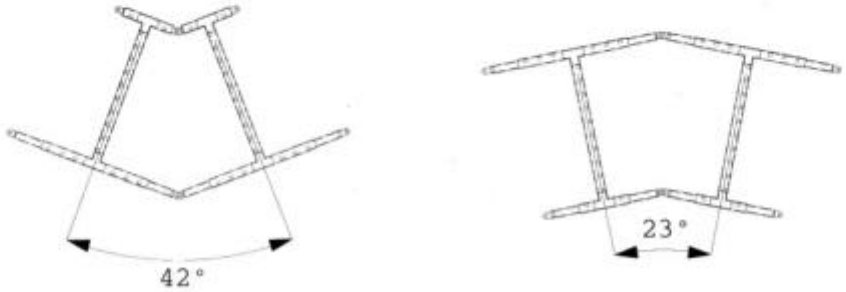
Linking multiple X-BOW Modules

The choice of horizontal angle between X-BOW modules depends upon the amount of horizontal coverage and the type of array required. Due to the versatility of the X-BOW rigging system many types of flown array are achieveable and only some of the permutations are explored in this manual. The user may experiment with other configurations, however extreme care must be taken in evaluating the required characteristics of the entire array. In the horizontal X-BOW limits the user to angles of 23°, 32° and 42° CONVEX and 23° CONCAVE, these angles having been optimised for configuration of the Alpha Series of cabinets. In addition, the X-BONE extentions allow the cabinets to be spaced horizontally to enable lower rows of cabinets to be kelped downwards for nearfield coverage. The options for X-BOW configuration are shown below:

23° Narrow and Wide Spaced



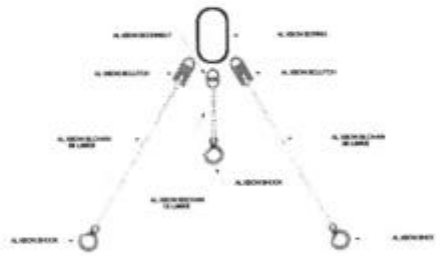
32° Narrow and Wide Spaced



42° Maximum Horizontal and 23° Concave

USING THE X-BRIDLE

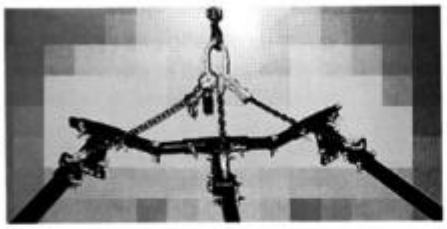
• Support the assembled X-BOW modules off the floor by connecting the chosen lifting system to the X-LBRKT lifting points using the X-BRIDLE as shown in the photograph. The X-BRIDLE may be used to attach two or three X-BOW modules to a single hanging point. Lifting three X-BOW modules requires the use of three legs of the X-BRIDLE, the short 12 link leg is used for the centre pick-up and the longer 36 link legs fitted with chain clutches are used for the outer pick-ups When lifting two X-BOW modules only the outer legs of the bridle are used. The centre leg can easily be stored by hooking it back to the D ring.

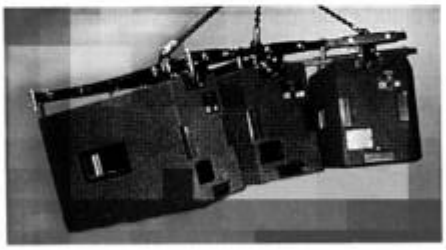


Adjustment of the chain clutches should be made with the X-BOW assembly lying flat on the ground and with the motor hoist raised to just tension the centre leg of the X-BRIDLE. There is sufficient play in the X-PIN connections to allow the chain clutches to be adjusted so that each leg is under approximately similar tension.

! It is not crucial that the legs are under exactly similar tension because the X-BOW modules are designed to flex slightly at the X-PIN connections. This allows the assembled modules to distribute the load equally when cabinets are attached.

• When the assembly is raised off the floor the X-BOW modules will be nose-heavy, however when the first row of Alpha cabinets are attached the system quickly reaches equilibrium.





• After the first row of cabinets have been attached the system should be raised to allow further cabinets to be positioned below them for attachment using X-KIT components.

! Take care to calculate the weight of cabinets suspended from each X-BOW module and the total weight per X-BRIDLE. The absolute limits are as follows:

Maximum load per X-BOW module = 500kG (Equivalent to 8 Alpha M3 Cabinets)

Maximum Load per X-BRIDLE = 1500kG (Providing that the suspension point allows)

Dealing with Loudspeaker Cables

The Alpha System uses relatively few cables, however flown cables can impose significant static and sometimes dynamic loads. Typically a good quality 8 x 2.5mm² cable will weigh 400g per metre, therefore a single cable attached to a flown cabinet 25m in the air will impose an additional load of 10kG.

As the System requires one cable per three M3/B1 pairs the total static load can be easily calculated, but it should be remembered that cables must not be allowed to bear their own weight at the connector and must be relieved with a separate attachment to the rigging system. This is most satisfactorily achieved with X-BOW by choking the cables with a 2m Spanset and attaching the Spanset to the D Ring component of the X-BRIDLE.

- Do not support cables from the X-BOW module as it may become unbalanced or incorrectly loaded due to the additional weight of the cables.
- Do not attach cables directly to the X-BOW modules.
- When flying the system particular attention should be given to cable management to prevent the cables becoming trapped during ascent. This can impose huge loads upon the system and could in extreme cases result in component failure. At best the result will be damaged and unreliable loudspeaker cables.
- When flying systems from single points the system may rotate freely about the lifting point and will require tying off. Always use lightweight rigging cord for this purpose which is cosmetically preferable and will break if the system is moved whilst the cord is connected.

! Never tie off the system using the loudspeaker cables!

! Never place shackles, tools, hinge components, cables or any other item on the top of a loudspeaker system, even for a moment during assembly. The item may be forgotten and remain on the system after it is flown. Vibration will cause the item to move and almost certainly fall causing possible injury should it hit anyone.

Secondary Safety Rigging

The requirements for secondary safety systems varies with territory and often from venue to venue. For example, some authorities require secondary safety steels only where the system is being flown above public areas.

- The ABSOLUTE RULE when using X-BOW systems is that secondary safety steels MUST be fitted to any X-BOW installation whether permanent or temporary. The secondary safety steel should be attached to the D ring on the X-BRIDLE and should be fixed to a suitable separate point in the supporting structure.
- The secondary safety steel and accessories MUST have a SWL equivalent to or greater than that of the principal rigging system and should be installed independently for each X-BRIDLE.

! As with all other rigging equipment, the secondary safety system should be inspected and installed by a qualified person.

Test Certificates

All rigging equipment requires regular testing by an approved Facility. Contact information for local Test Houses can usually be obtained from Chambers of Commerce or the local business associations operating in your territory.

- Always ensure that X-BOW is supported by a current annual test certificate and ask to see certificates for any equipment provided by others, especially motor hoists.
- Steels, shackles and other rigging hardware should be clearly stamped with safe working load (SWL) and should appear serviceable and free from surface damage.

Alpha System Configurations

The Alpha System is extremely versatile and may be used in many configurations to provide solutions to most sound field problems. This section of the manual addresses basic flown arrays and advises on ground stack techniques, however the user is invited to experiment with variations upon the theme whilst taking the guidelines into account.

Do's and Don'ts

• Try to deploy Alpha Arrays in a single source and configure the cabinet positions at the fringe of the array to address near field coverage wherever possible. Avoid combining separate flown and ground stacked arrays where the output of each array will overlap within in the sound field. This may be achieved by either completely flying or completely ground stacking, options made possible by the low weight / high output of the Alpha cabinets and the structural versatility of the X-BOW fly system.

• Consider coverage as the main criterion rather than power. Due to the high output of the Alpha System Components very high overall sound pressure levels can be achieved with relatively small quantities of cabinets. Remember that two cabinets positioned to cover the same point, particularly in the near field, will inevitably create interference distortion and will detract from the overall performance of the system.

• Avoid pointing an Alpha Mid-High cabinet towards any reflective surface. The high directivity and high output can also result in extremely audible reflections!

• Choose the appropriate Alpha Component for each application. M6 or PS series cabinets are most applicable in smaller venues and near field applications, M3 cabinets are more useful in longer throw high power arrays.

• The Alpha System is a piece of precision hardware which can provide highly predictable results in many situations, however it is necessary to undertake an informed evaluation of the environment before installing the system. NEXO recommend the use of current computer modelling programs. NEXO currently provides EASE™ data files for all products and will in due course support other programs - please contact your dealer for further information.

NEXO would like to hear from any users who discover new applications for Alpha System and X-BOW.

Please contact us at:

NEXO Research & Development
154 Allee des Erables
ZAC de Paris Nord II
B.P. 50107, F-95950 Roissy
C.D.G. CEDEX France

tel: +33 1-48 63 19 14
fax: +33 1- 48 63 24 61
http://nexo-sa.com/

3 WIDE X 3 DEEP

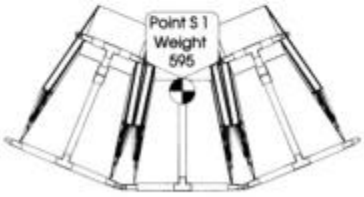
Typical X-BOW Settings:
Link configuration: 23° Wide
Lifting point position: 2
Vertical angle Row 1: 0°
Vertical angle Row 2: -8°
Vertical angle Row 3: -16°

Nominal Dispersion:
Horizontal: 100°
Vertical: 40° (Max 90°)

Applications:
Centre cluster in theatres
L/R Array in wide theatres / small arenas
L/R Array for outdoor systems

This configuration is a straightforward solution for many situations where a generic hang is required and there are no severe acoustical problems with the space. Care should be taken to direct the output of each array away from the side walls to prevent early reflections.

It is usually necessary to provide very near field coverage when using high directivity systems if severe reflection problems are to be avoided. NEXO recommend the use of NEXO PS series cabinets for this application as their characteristics are complementary to the Alpha system.



2 WIDE X 5 DEEP

X-BOW Settings:
Link configuration: 32° Wide
Lifting point position: 2
Vertical angle Row 1: 0°
Vertical angle Row 2: -0°
Vertical angle Row 3: -4°
Vertical angle Row 4: -8°
Vertical angle Row 5: -8°

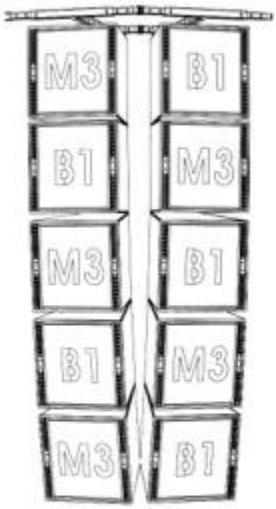
Nominal Dispersion:
Horizontal: 80°
Vertical: 30° (Max 60°)

Applications:
L/R Array in narrow theatres / arenas

A very useful array where the soundfield is narrow and the side walls are reflective. Typically many older theatres have these characteristics and in these the 2W x 5H Array excels. The benefits of this design are that a large proportion of the auditorium falls within the stereo soundfield and that few if any nearfield cabinets are required.

It is often necessary to attenuate the onstage columns to reduce the incidence of reflection from the far wall.

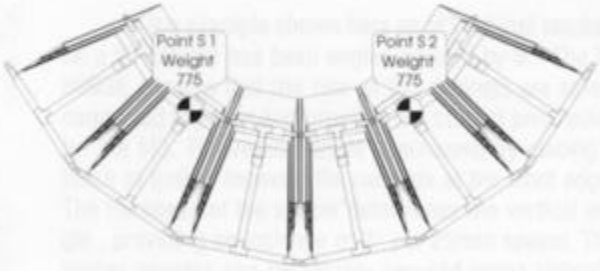
It may be desirable to provide delay cabinets at the rear of the auditorium to maintain intelligibility. NEXO recommend the use of NEXO PS series cabinets for delay applications as their characteristics are complementary to the Alpha system.



6 WIDE X 4 DEEP

X-BOW Settings:
Link configuration: 23° Wide
Lifting point position: 3
Vertical angle Row 1: 0°
Vertical angle Row 2: -4°
Vertical angle Row 3: -8°
Vertical angle Row 4: -12°
Vertical angle Row 5: -16°

Nominal Dispersion:
Horizontal: 150°
Vertical: 75° (Max 90°)



Applications:
L/R Array in arenas
L/R Arrayfor outdoor systems

Used where high output is required with wide horizontal and vertical dispersion. The vertical columns are rigged in 5, 6 or 7 wide depending upon the amount of horizontal dispersion required. Further rows may be added for extremely high power applications, however the maximum load per X-BOW is 8 x M3 Cabinets.

SUBS

General Guidelines
Groundstacked sub arrays should be placed directly beneath flown systems. Any sideways or front-back misalignment will result in variable and very audible interference between the arrays.

Alpha S2 cabinets should, where possible be stacked 2 or even 3 high rather than wide. High stacks have the advantage of increased directivity, whereas single height arrays have practically a hemispherical output in the vertical, producing almost as much VLF behind as in front of the cabinets. This characteristic is typical of all sub cabinets and is largely a function of the dimensions of the radiating surfaces.

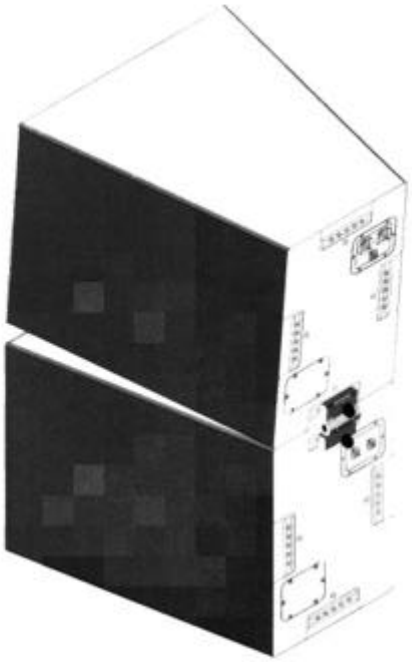
It is often desirable to include B1 and M6 cabinets in sub arrays to improve nearfield coverage, especially where the flown system is trimmed high. In this case extreme care should be taken to ensure that the nearfield cabinets are attenuated to a level where they are not audible in the field of the flown system, otherwise severe variable interference between the two sources will result in unpredictable coverage.

When groundstacking Alpha systems the X-HINGE should be used to secure and stabilise the array. The X-HINGE may be fitted horizontally or vertically at the rear of the stack and/or vertically at the front thus eliminating the need for ratchet straps or other improvised security methods.

GROUND STACKS AND X-BOW

Alpha Systems may be ground stacked easily to produce coherent, balanced and stable arrays. Refer to NEXO Alpha Application Notes for further information on ground stack techniques.

X-BOW components can be used to stabilise ground stacks and also to ensure that cabinets remain securely registered to each other where it is desirable to angle cabinets within a groundstack.



In the example shown here an M3 cabinet stacked on a B1 cabinet has been angled upward by 6°. The X-HINGE ensures that the rear of the cabinets are safely connected together and provides the correct pivot point for the M3. The vertical angle is achieved by placing a block of timber between the cabinets at the front edge. The thickness of the spacer determines the vertical angle , providing an increase of 2° per 25mm spacer. The timber spacers can be reliably secured using Velcro™ strips.

GROUND STACKS AND SAFETY

Statistically, many more injuries occur due to unstable ground stacked PA systems than those associated with flown systems. There are several reasons for this fact, however the message is clear:

- Always survey the supporting structure upon which a ground stack is to be built. Always look beneath PA wings to inspect the deck support and if necessary ask that stage scrims and dressings be removed to allow access.
- If the stage surface slopes, as it does in some theatres, ensure that the system is prevented from sliding forwards due to vibration. This may require the fitting of timber battens to the stage surface.
- For outdoor systems ensure that the system is protected from wind forces which might cause the ground stack to become unstable. Wind forces can be huge, especially upon large systems, and should never be underestimated. Observe meteorological forecasts, calculate the likely effect upon the system prior to erection and ensure that the system is secured appropriately.
- Take care when stacking cabinets. Always employ safe lifting procedures and never attempt to build stacks without sufficient personnel and equipment.
- Never allow anyone, whether operators, artists or members of the public to climb onto a ground stacked PA system. Anyone who must climb over 2m high should in any case be fitted with suitable safely equipment including a clip-on harness. Please refer to local Health and Safety legislation in your territory. Your dealer can help with advice on access to this information.
- Apply the same attention to all safety matters when de-stacking systems.
- Be aware that safety procedures are as important in the truck and in the warehouse as they are at the venue.

ALPHA X-BOW MASTER PARTS REFERENCE

Main Parts	ALPHA Product Reference		Product Description
AL.XBOW.XBOW	**Complete XBOW Metalwork Assembly**		
1	AL.XBOW.XSPINE		Crossbow main member
1	AL.XBOW.XMBL		Male trombone long
1	AL.XBOW.XMBS		Male trombone short
1	AL.XBOW.XFBL		Female trombone long
1	AL.XBOW.XFBS		Female trombone short
1	AL.XBOW.XFCBRKT		First Cabinet Bracket
1	AL.XBOW.XLBRKT		Lifting Bracket
6	AL.XBOW.XPIN		Complete Pin Assembly
	1	AL.XBOW.PSETPIN	3 Hole Pin
	1	AL.XBOW.PRING30	Keyring 30mm
	1	AL.XBOW.PRCLIP4	4mm R Clip
AL.XBOW.TKIT	**Complete Top Cabinet Flying Kit**		
1	AL.XBOW.THINGE		Complete Top Hinge Assembly
	1	AL.XBOW.TMHINGE	** Top Hinge Assembly
	2	AL.XBOW.HSTUD8	** Hinge loadbearing stud
	1	AL.XBOW.HPLUNG	Hinge locking plunger
	1	AL.XBOW.HSPRING	Spring
	1	AL.XBOW.HRING25	Keyring 25mm
2	AL.XBOW.TLINK		XBOW to Top Cabinet Link
AL.XBOW.KIT	**Complete Inter-Cabinet Flying Kit**		
1	AL.XBOW.HINGE		Complete Hinge Assembly
	1	AL.XBOW.HASSY	** Hinge Assembly
	4	AL.XBOW.HSTUD8	** Hinge loadbearing stud
	2	AL.XBOW.HPLUNG	Hinge locking plunger
	2	AL.XBOW.HSPRING	Spring
	2	AL.XBOW.HRING25	Keyring 25mm
2	AL.XBOW.LINK		Front Inter-Cabinet Link
AL.XBOW.BRIDLE	**Complete 3 Leg Bridle**		
1	AL.XBOW.BDRING		D Ring
1	AL.XBOW.BSCHAIN		Centre leg 12 link chain
2	AL.XBOW.BLCHAIN		Outside leg 36 link chain
2	AL.XBOW.BCLUTCH		Outside leg chain clutch
3	AL.XBOW.BHOOK		Hook to Lifting Bracket
1	AL.XBOW.BCONNECT		Chain Connector to D Ring

Items marked ** are not available as spare parts. Please refer to your dealer for information on factory refurbishment. All other parts are available from your dealer - please quote the ALPHA Product Reference shown above.

Nexo France 154 Allee des Erables ZAC de Paris Nord II B.P. 50107, F-95950 Roissy C.D.G. CEDEX France

Nexo International 2 Lyon Road Walton-on-Thames Surrey KT12 3PU